



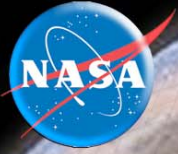
It's Not Just About the IT: Developing Systems that People Can (and Will) Use

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Agenda

- IT Project Facts and Figures
- Potential Pitfalls
- Success Strategies
- Summary



IT Facts and Figures

- Government IT projects have a failure rate that is 50% higher than private sector
- 66% of government IT projects fail
- Through 2010, government agencies will cancel 30% of IT projects initiated, including 10% of projects with budgets over \$200K
- 50% of IT projects are managed outside of the project office



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Potential Pitfalls

- Requirements
 - Unclear objective for the solution being provided
 - Automating a process instead of providing a solution
 - Requirements defined by technical community based on how the technology works
 - Concept of operations is not considered
 - Adding one more light to the Christmas tree
 - Being all things to all people
 - Lack of baseline-->scope creep
- Data Management
 - Unclear authoritative source(s)
 - Interfaces/integration to other systems ill-defined or missing
 - Data standards not fully developed
 - Lack of reconciliation process
 - No end-user method in place to correct errors



Potential Pitfalls

- Customer Expectations
 - Undefined “extra” features
 - Doesn’t answer “what’s in it for me?”
 - Doesn’t work as described
 - System availability and use is based on technical constraints
 - Getting help becomes a treasure hunt
- Usability
 - 508 compliance (web accessibility) standards ignored
 - System assumes understanding of IT language and processes
 - Minimal focus on end-users’ platform/browser and user interface requirements
 - Testing is not done with a diverse population



Potential Pitfalls

- Business Process

- Changes to policies and procedures will be added “later”
- System flow does not follow mission/business process
- New manual processes and/or people are added to the work flow that were not defined in the requirements or design
- Lack of familiarity with technology and IT trends and drivers
- Not understanding customer’s willingness to change
- Weak governance and change control processes

- Risk Management

- Risks, what risks?
- Unilateral decision-making on what is/not a risk
- Decision on risk mitigation is deferred
- Not following structured methodology (I.e., 7120.5)



Potential Pitfalls

- Contractor Management
 - Too much reliance on contractor expertise
 - Focus is only on the application and not on integration with other systems or business processes
 - Lack of clarity on definition of a “finished” system
 - Majority of time focused on development
 - Contract is written to perform a task, not provide a solution
- Project Management
 - Methodology used is determined “as needed”
 - Inadequately prepared project manager
 - Focus solely on implementation and not on-going operations
 - Focus on IT-only aspects
 - Schedule becomes the primary driver without shift in budget or requirements



Potential Pitfalls

■ Accountability

- Unclear who owns the mission/business and IT processes, hardware, software and on-going operations
- Unclear who gets the “final” say at multiple points in the system development lifecycle
- People who “own” a piece of the process or system don’t talk to other people who think they own the same thing

■ Sustainability

- IT products are leading/bleeding edge or ancient
- Cost of hardware, software or personnel to run the system exceeds the budget
- Interoperability requirements not defined
- No alignment with future functional requirements and/or IT direction
- Insufficient planning for long-range projects



Success Strategies

- Manage the Project

- Use a methodology that follows best practices
- Develop the concept of operations with the design
- Identify cost, schedule, requirements trade-offs
- Identify non-negotiable requirements
- Test, test, test

- Mitigate Risks

- Use case scenarios can point out problem areas early
- Draw end-to-end work flow and data flow diagrams
- Develop a data dictionary
- Document and publish agreed to changes
- Include the IT security person as part of the team



Success Strategies

- Focus on Outcome
 - Clearly define the outcome goal
 - Design for change, scaling the system to grow and/or add functionality
 - Time spent on requirements and design is time well spent
 - Be pragmatic in initial rollout so the customer gets a product
 - Use customer feedback for refinements and next steps
- Understand the Environment
 - Make allies of the people who can help make the project successful
 - Speak in a language the community understands
 - Identify and resolve cultural barriers



Success Strategies

- Understand the Business Process
 - Recognize and implement necessary policy and procedure changes for the system to be viable *before* the system goes into production
 - Establish mechanism for issue resolution
 - Identify what needs to change, write it down and develop a plan for managing it
- Manage Customer Expectations
 - Consistently answer the “what’s in it for me?” question
 - Provide opportunities for input into changes to requirements or design throughout the development lifecycle
 - Give credit for good ideas



Success Strategies

- Communicate Early and Often
 - Identify communities of interest
 - Develop communication plan that includes opportunities for customer contribution
 - Define multiple channels for disseminating information and use those channels consistently
 - Provide a feedback loop
 - Provide timely answers to question
 - Listen
 - Generally, people who do the work know best how their jobs *should* be done
 - Different thinking isn't wrong
 - If the user can't find it, the function's not there



Summary

- Look at the world through the eyes of your customer
- Challenge the status quo
- Listen first; talk second
- The more people engaged in the process, the more likely the outcome will be accepted
- Define roles and responsibilities
- Automation is not always the right answer
- Design global; build local
- Communication is a two-way street